

246

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THE
Poor Mans
D Y A L.
WITH AN
INSTRUMENT
To Set It.

Made applicable to any place in
ENGLAND, SCOTLAND,
IRELAND, &c.

BY
Sir SAMUEL MORLAND
Knight and Baronet. 1689.

are to be Sold at all the Button-Sellers, Cutlers, and Toy-
shops about the Town. And will be shortly publisht in several other
and Dimensions, for the Good of the publick, and for the Con-
firmation of the Manufacture of our Nation.

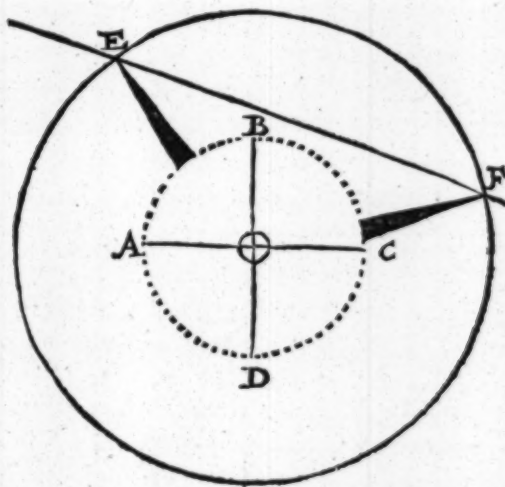
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NEW YORK

The Poor Man's Dial,

With an Instrument to Set it.

To Set the Dial.

First, Set the small Instrument upon any Level place, where the Sun comes two or three hours before, and as many after Noon, and by the 4 Marks at the bottom, make the 4 Points (A, B, C, D) and by those Marks make two Lines, (A, C) and (B, D) crossing each other in the Point (O.) Then mark the Point (E) where the



A 2

shadow

shadow of the Pin terminates in the Forenoon. And having from the Distance (O E) described a Circle, watch in the Afternoon, when the shadow of the Pin cuts the Circle in the Point (F) for the Line (E F) is a true East and West Line; And the Hours of (VI) and (VI) upon the Dial, being placed upon the said Line, the Dial is truly set.

DIRECTIONS.

FOR *London*, or any place within 20 Miles, the Dial must be placed exactly Level; But for the following place, the North-side of the Dial (where is the Hour of (XII)) must be elevated higher than the Opposit, or South-side, as is hereafter exprest, which every Carpenter and Joiner knows how to perform.

IN ENGLAND.

B EDFORD, about 1	<i>Huntington</i> , 1 sixteenth.
twentieth part of an	<i>Ipswich</i> , 1 twentieth.
Inch.	<i>Kendal</i> , 3 sixteenths.
<i>Berwick</i> , 1 tenth.	<i>Lancaster</i> , 1 fifth.
<i>Buckingham</i> , 3 hundreths.	<i>Leicester</i> , 1 sixteenth.
<i>Cambridge</i> , 1 twentieth.	<i>Lincoln</i> , 1 tenth.
<i>Carlisle</i> , 1 fourth, or a quarter.	<i>Northampton</i> , 1 sixteenth.
<i>Chester</i> , 1 tenth.	<i>Normich</i> , 1 tenth.
<i>Colchester</i> , 1 twentieth.	<i>Oxford</i> , 1 fiftieth.
<i>Darby</i> , 1 tenth.	<i>Stafford</i> , 1 tenth.
<i>Durham</i> , 1 fourth.	<i>Shrewsbury</i> , 1 tenth.
<i>Glocester</i> , 3 hundreths.	<i>Stanford</i> , 1 tenth.
<i>Hartford</i> , 1 fiftieth.	<i>Warwick</i> , 1 sixteenth.
<i>Hereford</i> , 1 twentieth.	<i>Worcester</i> , 1 sixteenth.
	<i>Tork</i> , 1 fifth.

WALES.

WALES.

Anglesey, 1 eighth.
 Barmouth, 1 tenth.
 Breconock, 1 twentieth.
 Cardigan, 1 sixteenth.
 Caermarthen, 1 twentieth.
 Carnarvan, 1 twentieth.
 Denbigh, 1 tenth.
 Flint, 1 tenth.
 Landaff, 1 hundreth.
 Monmouth, 1 fiftieth.
 Montgomery, 1 twentieth.
 Pembroke, 1 fiftieth.
 Radner, 1 twentieth.
 St. David, 3 hundreths.

The Isle of Man, 3 sixteenths.

SCOTLAND.

ABerdean, 43 hundreths.
 Dunblain, 1 third.
 Lunel, 3 eights.
 Edinburgh, 3 tenths.
 Glasgow, 3 tenths.
 Kinsale, 45 hundreths.
 Orkney, 59 hundreths.
 St. Andrews, 1 third.
 Skyrassin, 1 half.
 Sterlin, 3 tenths.

IRELAND.

ANtrim, 1 fifth.
 Arglas, 15 hundreths.
 Armagh, 17 hundreths.
 Caterbergh, 17 hundreths.
 Clare, 8 hundreths.
 Cork, 3 hundreths.
 Drogheda, 1 eighth.
 Dublin, 1 tenth.
 Dundalk, 1 eighth.
 Galloway, 1 tenth.
 Kenny, 7 hundreths.
 Kildare, 1 tenth.
 Kingstown, 1 eighth.
 Knockfergus, 1 fifth.
 Kinsale, 1 hundreth.
 Limerick, 7 hundreths.
 Queenstown, 1 tenth.
 Waterford, 1 twentieth.
 Wexford, 1 sixteenth.
 Youghall, 3 hundreths.

For the Places hereafter mentioned, the North-side of the Dyal must be lower than the South-side, viz.

In

In ENGLAND.

Bristol, 1 hundreth.
 Canterbury, 1 tenth.
 Chichester, 1 sixteenth.
 Dorchester, 1 twentieth.
 Exeter, 1 sixteenth.
 Gilford, 1 fiftieth.
 Reading, 1 hundreth.
 Salisbury, 3 hundreths.
 Truro, 7 hundreths.

The ISLANDS.

Guernsey, 1 eighth.
 Jersey, 1 eighth.
 Lindy, 1 hundreth.
 Portland, 7 hundreths.
 Wight, 1 twentieth.

If it be required to fix any Dyal in any place of *England*, *Scotland*, &c. not mentioned in this Catalogue, it must be set according to the nearest of the places that are mentioned, and it will serve without any sensible Error, and much better than those ordinary Brass Dyals, which are usually made by ignorant Apprentices and Journey-men: Or that Cobbled Pewter Dyal, which was lately made by a Brazen-fac'd Founder, in Imitation of this *Poor Man's Dyal*, and deserves at least, by way of Transposition, the Name of *That Man's Poor Dyal*; For tho' he had the Wit to make a Circle of the same Diameter, and to set off all the Divisions of the Hours, Halfs, and Quarters from the other; yet the Style is so False and Defective in all its Parts, that it is not to be mended by one, who knows nothing of a *Dyal*: Yet, notwithstanding, in one thing he is to be commended, that he has made the Hour-Lines so short, that the Shadow, of the False Gnomon, will not so easily discover his Errors. Besides, he has carefully fill'd up the Vacancies in the middle of the *Dyal*, with the Points of the Compass, which are only proper for an Upright Style, and clogg'd the Tail of it with

with five Leaden Bells, within a pair of Rams-horns, to ring aloud the praises of his Shceps-head, for attempting to Imitate or Counterfeit another Man's Contrivance, without being able to perform it like an Artift: Forasmuch as any person who has the least knowledge of those matters, will soon distinguish between the true Original, (which was first Calculated, and afterwards Exactly Delineated by Sir *Samuel Morland's* own Hands, and the Molds of the Style, which is the principal part of the *Dyal*, carefully Contrived and Corrected) and that ignorant Founder's Counterfeit, and Ill-contrived *Dyal*, to which he has put a Date of 1690, to let the World understand that it was none of his own Contrivance, but that he did Counterfeit one that was made before, viz. in 1689. And of which the Style comes False out of the Mold, and by Cutting and Scraping is made Ten Times worse.

If by Accident in sending about, or otherwise, any of these *Lyals*, or the Stiles of them being but Block Tin, shall happen to be Bent; Then with the help of a Square, or for want of that, of a quarter of a Sheet of any Paper folded up in a double fold, (which makes an exact Square) it may be bended back, and set right again.

F I N I S.

